

CLIMATOLOGICAL DATA FOR JULY, 1911.

DISTRICT No. 3, OHIO VALLEY.

FERDINAND J. WALZ, District Editor.

GENERAL SUMMARY.

The distinguishing features of weather conditions of July, 1911, in the Ohio Valley, were: First, the intense heat that obtained during the first 10 to 12 days, and especially on the 3d and 4th, when the high temperatures registered and general distress occasioned were second only to those experienced in the memorable hot July of 1901, which broke all previous records. Numerous prostrations and many deaths resulted from the oppressive heat, which was especially severe in the central and more northerly portions of the district. South of the Ohio River, except in Kentucky, the suffering was not so great, and in the southeastern section, that is, in eastern Tennessee and the more elevated portions of western North Carolina and southwestern Virginia, the heat was not so severe as to cause much, if any, distress.

Second, the remarkably cool weather which prevailed over all the district from the 16th to practically the end of the month, and especially the record-making low temperatures for July that were reported in the period 24th-27th, when previous local records for July low temperatures were broken at numerous stations in several of the States and previous State records were broken in two of the States comprised in the district. Light frost formed in some of the mountain regions as far south as North Carolina, and minimum temperatures from 34° to 40° were reported from places in the mountains.

Third, the droughty conditions and the general suffering of vegetation from lack of sufficient moisture over nearly all the Ohio River drainage area, except that of the Tennessee River Basin, in the extreme southern and southeastern part. While showers were numerous and there were a few fairly general rains, yet the aggregate of precipitation for the month was small and far from supplying the general needs, except over the area mentioned above. The rainfall coming in showers was very unevenly distributed and local in character. In some favored places these showers gave sufficient moisture to effectively relieve the droughty condition, but in many, and in fact most sections, the amount of rainfall was inadequate, and the showers occurring gave only slight and passing relief.

Fourth, the unusually high percentage of sunshine and clear days, notwithstanding that the average number of days with appreciable rainfall was large in some of the States; and fifth, the severity of the local thunderstorms and the large number of deaths, about 27, resulting from lightning. Of these deaths, 12 occurred in Kentucky, 8 in Pennsylvania, 1 in West Virginia, 2 in Alabama, and the rest in Ohio.

The prolonged droughty conditions which had prevailed over so large a portion of the district from early in May to the end of July, together with the extreme heat during the

first part of the latter month, worked **fearful and wide** disaster to pastures and gardens and threatened many of the field crops. At the end of the month the soil in nearly all parts of the district, except probably the extreme southern portion, was parched, hard, and dry; fields were burned and brown, and all streams and water sources were very low; and while a shortage of water supply for stock and general use had not become critical, it was tending decidedly in that direction.

TEMPERATURE.

The month, as regards temperatures, falls into two distinct divisions: (1) a period of some 10 or 12 days when they were remarkably high, and (2) a period of about 16 days when they were unusually low.

The period of hot weather ran from the 1st to about the 12th, and was particularly severe in the central and more northerly portions of the district. In these sections the mean daily temperature during these 10 or 12 days was 80° and over at practically all the Weather Bureau stations, while on 5 consecutive days it was 85° or over at several stations. It was 90° at Louisville, Ky., on the 3d, 90° at Evansville and Indianapolis, Ind., and 92° at Columbus, Ohio, on the 4th. The latter was the highest mean temperature of any day at any station in the district, and is the highest that has occurred in the Ohio Valley since the memorable July heat of 1901.

Maximum temperatures registered from 90° to 100° and over nearly every day during this hot wave, except at the more elevated stations in the mountain sections of North Carolina, Virginia, and West Virginia. The most intense and general heat was experienced on the 3d and 4th, when maximum temperatures between 100° and 107° were registered in all the States of the district except in southwestern Virginia, where the highest temperature of the month was 95°, and in northern Georgia and northern Alabama, where it was 98°. These high temperatures, generally speaking, have been exceeded or equalled in the Ohio Valley only by the July record of 1901, while at many stations in West Virginia, Ohio, Indiana, and Illinois and at a few stations in Kentucky they break all previous records of high temperature, not only for July, but for all other months. The highest temperature was 107°, at Dayton, Ohio, on the 4th. This has been equalled in Kentucky twice and exceeded once since the records began, in 1889. The highest registered in that State, and which is probably the highest temperature on record in the district, is 112°, and occurred at Paducah, Ky., July 23, 1901.

Fortunately, on the 4th, 5th, 6th, 7th, 9th, and 10th, after a high temperature had been reached in the early afternoon, local thunderstorms that developed later gave temporary relief from the intense heat of the day in many localities. This was particularly noticeable in the central

portion of the district, especially that adjacent to the Ohio River, on those dates. This situation was also noted in eastern Tennessee on the 3d, 8th, and 11th.

About the 13th there was a change to cooler weather, due to an area of high pressure to the northward bringing cool, northerly winds from the Lakes. And on the 13th, for the first time during the month, temperatures were below normal over the larger part of the district, abnormally high temperatures continuing only over the southeastern portion, where the heat had not been so intense. There was a rapid change to warmer, however, during the 14th and 15th, when high temperatures were again registered over much of the district, but particularly in Kentucky and Tennessee, where maximum temperatures registered between 90° and 100° on those days.

On the 16th, following the passage of a moderate trough of low pressure across the central valleys and the Lake region during that day, there came about a decided and what proved to be a permanent change to cooler, and during the rest of the month the temperature was not only below normal practically every day over nearly all the district, but there occurred in the period 24th-27th some of the most unseasonably cool weather for July that has happened in this section of the country for many years.

During the entire cool spell of about two weeks morning temperatures in the forties and fifties were the rule on the majority of the days at nearly all stations, but on the 25th, 26th, and 27th they were largely below 50° and at many stations nearer 40° than 50°, while at several stations variously located in the western portions of New York, Pennsylvania, Maryland, West Virginia, Virginia, and North Carolina they ranged as low as 34° to 40°. Light frost was reported on the morning of the 27th at Bolivar, N. Y., and at Banners Elk and numerous other points in the mountains of North Carolina.

Minimum temperatures of 41° at Erasmus, Tenn., and 42° at Farmers, Ky., on the 27th are the lowest temperatures ever recorded in July in those States, and 38° at Banners Elk, N. C., equals the lowest for that State. Minimum temperature records for July were also broken at many stations in Ohio, Indiana, and Illinois. The lowest temperature of the month in the district was 34° at Burkes Garden, Va., on the 27th. Another noteworthy feature of the cool spell about the 24th to 27th is the remarkable record of low maximum temperatures made at that time at many stations. In Kentucky on the 24th, 25th, 26th, and 29th the maximum temperatures were unusually low. At very few stations in that State did the day temperature go higher than 80° on most of those days, and at one station it did not go above 70° on one day.

There was a rather sudden change to warm weather over the northeastern portion of the district at the end of the month, and on the last day the temperature rose above 90° at stations in Ohio, eastern Kentucky, and the western portions of Pennsylvania and New York.

PRECIPITATION.

Precipitation during the month came mostly as local showers, but there were also a few days of general rain, and while these showers were rather frequent and would have served fairly well in ordinary midsummer seasons, yet this year, on account of the general drought conditions that have prevailed practically from about the 10th of May, the moisture received was insufficient for the needs of pastures, staple growing crops, wells, springs, and

streams, except over very limited areas chiefly in the southern portion of the district.

Over the northern portions of Alabama, Georgia, the extreme western portions of North Carolina and Virginia, and over much of southern, central, and eastern Tennessee the total rainfall of the month was 4 inches or more, somewhat in excess of normal and bountiful. In a few favored localities in other portions of the district rain was about normal and ample, but over the rest of the district from northern Tennessee northward to the northern boundary and over the eastern States of the district the aggregate of rainfall for the month was much under 4 inches and decidedly deficient in both amount and effect. Over large areas in the central, northern, and eastern portions of the district the total rainfall of the month was 2 inches or under and in many localities less than 1 inch. On account of the local character of the rainstorms the distribution of precipitation was very irregular, the amount received varying greatly in neighboring localities. In Kentucky two stations, widely separated, received precipitation in excess of the normal July amount. At one of these stations, Williamstown, where the amount was 6.58 inches, it is the largest July amount received during the past 10 years. The monthly amount of precipitation for the various stations varied between 0.2 inch at Chillicothe, Ohio, and 8.88 inches at Diamond, Ga.

At some stations in several States the total rainfall for the month was the smallest for any July of record. On the other hand, there were a few instances of excessive 24-hour rainfalls in West Virginia, southwestern Virginia, Ohio, North Carolina, and Tennessee.

The periods during which rain was quite general were: 7th-11th; 16th-17th; 20th-21st, and 23d-24th. Practically no rain fell during the first three or four days, and over much of the district during the first six days, and from the 25th to the 29th. On other dates than those mentioned there were scattered showers, varying greatly in amount of precipitation, although mostly light.

Thunderstorms were quite general in the period from about the 4th to the 13th; again on the 16th-17th and the 20th-22d. There were also occasional local thunderstorms on other dates. In several of the States of the district there were 20 or more days with thunderstorms, Ohio leading with 23 days. Wind squalls, with some local damage, attended a number of these storms, and there was hail with quite a few, also the fatalities to human life by lightning were unusually great.

MISCELLANEOUS.

July 3.—The worst storm in the history of Braxton County struck Sutton, W. Va., at 5 p. m. The storm came from the northeast and passed in a southwesterly direction. There were at least 50 houses unroofed in Sutton, a number of stables and many trees blown down, about 6 or 7 porches to houses blown away, a church about a mile from Sutton destroyed, and several cows and horses and one boy killed. The storm covered only a narrow strip.

July 4.—A man was killed in the harvest field during a storm near Barnesville, Ohio, and both horse and rider were killed when Raymond Haley was struck by lightning near Lexington, Ky.

July 7.—A storm at Wheeling, W. Va., wrecked five motor boats and caused the drowning of a young girl who was blown out into midstream while bathing. On the Ohio side of the river a man was drowned by the sudden overflow of a small stream during this storm.

Five persons were reported killed by lightning in the vicinity of Pittsburgh, Pa. Four people standing under a tree in Fayette County, Ohio, were injured by lightning. During a severe electrical storm which passed over Gallatin County, Ky., a young farmer named Spencer Lillard was struck by lightning and instantly killed. A team of mules he was driving was also killed, and William Craig, a relative of Mr. Lillard, was burned, but his injury was not serious.

July 8.—A young man was struck by lightning at Lebanon, Ky., and badly injured, but will recover. One man was killed and several others severely injured at Barbourville, Ky., when lightning struck a carryall in which they were riding. The wagon was demolished, but the horses escaped injury. Miles Williams, while milking a cow, was struck by lightning and instantly killed at Marrowbone, Ky.

July 9.—Lightning knocked a man from a mowing machine, splitting one wheel of the machine, near Lewisburg, W. Va. A colt was killed during the same storm. A man was killed by lightning in Fairfield County, Ohio.

July 10.—During the progress of a violent electrical storm which passed over Shelby County, Ky., John H. Grubbs, a prosperous farmer, was instantly killed and four others stunned by a bolt of lightning which struck a barn in which they had taken refuge. The barn was not injured.

July 11.—Severe thunderstorms accompanied by high winds occurred in many parts of Ohio during the afternoon, and several deaths from lightning occurred. A young farmer residing near Paducah, Ky., named Dal. Heath, was killed by lightning which struck a tree under which he had taken shelter. His brother was also injured. Lightning struck the barn of Walter Owens, of Goodnight, Ky., near Glasgow, Ky., killing Mr. Owens, but the barn, though filled with hay, was not injured. At Somerset, Ky., during a thunderstorm, lightning struck the huge repository oil tank of the Cumberland Pipe Line Co. The tank contained nearly 24,000 barrels of crude oil, which was entirely consumed. Will Pierce and Clayton Eads were killed and two other men severely injured by lightning near Barbourville, Knox County, Ky. In Benton and Warren Counties, Ind., a hailstorm swept over about 16 sections of land. It is said that it lasted only about 15 minutes, during which time

hailstones as large as hulled walnuts fell. The path of the storm was about 3 miles in width and 14 miles in length. Over a large part of this area the crops were utterly destroyed, corn particularly suffering.

July 12.—During a severe electric storm, W. P. Ward, a merchant and postmaster at Bardstown Junction, Ky., was instantly killed by lightning while working in the field. During the same storm, Everett Middleton, a young farmer, while working in his cornfield near Shepherdsville, Ky., was killed by lightning. His team was also killed. The Rev. Mr. Gibson was struck and killed by lightning while riding along the road on Indian Creek, Knox County, Ky. This was the fourth person to lose his life, besides several thousand dollars' worth of property destroyed, in this county within five days.

July 22.—Three persons were killed and two injured by lightning in the vicinity of Greensburg, Pa. Mrs. Harmon and child were killed by lightning at Pleasant Hill, Ala., and two mules were killed by lightning and a man badly shocked in the same locality.

July 24.—A rather severe gale occurred at Columbus, Ohio. The wind reached a velocity of 63 miles per hour from the west, which is only 1 mile below the maximum record for July at that place. The wind was high over the greater portion of Ohio, and considerable damage was done to buildings, growing crops, fruit, and service wires.

ENGINEERING NOTES.

The Government dam and lock in the Ohio River at Fernbank, 7 miles below Cincinnati, Ohio, has been completed, and the first boat was locked through on July 22. This is Dam No. 37 in the general scheme of improvement of navigation on the Ohio River, and its completion is a big step in this great work to make the Ohio River navigable the entire year. This is the largest movable wicket dam in the world and the only one made entirely of concrete and steel. The dam is 1,185 feet long and cost, completed, \$1,300,000. It will insure to Cincinnati and for 25 miles above the dam a permanent navigable stage of 9 feet of water the year round. This work was officially inspected by the Rivers and Harbors Committee of Congress on their recent trip down the Ohio River from Pittsburgh to Cairo.

TABLE 1.—Climatological data for July, 1911. District No. 3, Ohio Valley.

Stations.	Counties.	Elevation, feet.	Length of record, years.	Temperature, in degrees Fahrenheit.						Precipitation, in inches.						Sky.				Observers.
				Mean.	Departure from the normal.	Highest.	Date.	Lowest.	Date.	Greatest daily range.	Total.	Departure from the normal.	Greatest in 24 hours.	Total snowfall, unmeasured.	Number of rainy days, 0.01 inch or more.	Number of clear days.	Number of partly cloudy days.	Number of fully cloudy days.		
<i>New York.</i>																				
Allegany.....	Cattaraugus.....	1,441	5	69.8	.....	98	4†	40	18	42	2.55	.....	0.88	0	13	11	17	3	nw.	Charles E. Whitney.
Bolivar.....	Allegany.....	1,800	17	69.6	+ 2.8	101	4	38	27	44	2.97	- 1.83	1.05	0	12	11	18	2	sw.	B. O. Newton.
Olean.....	Cattaraugus.....	.....	3	.....	.....	.....	.....	.....	.....	.....	2.47	.....	0.68	0	11	20	7	4	e.	John W. Alles.
<i>Pennsylvania.</i>																				
Aleppo.....	Green.....	1,135	10	73.1	+ 1.1	98	3	45	27	39	1.37	- 3.72	.60	0	3	23	7	1	sw.	J. S. Hinerman.
Baldwin.....	Butler.....	1,404	5	73.2	.....	97	4	42	21	42	1.84	.....	.75	0	9	20	11	0	w.	S. H. Templeton.
Beaver Dam.....	Beaver.....	674	17	.....	.....	.....	.....	.....	.....	.....	2.34	- 1.08	1.33	0	7	15	10	6	sw.	R. C. McCullough.
Brookville.....	Jefferson.....	1,173	20	71.9	.....	105	4	39	27	51	1.34	- 3.65	.46	0	7	.....	.....	.....	w.	H. C. Bartholomew.
Clarion.....	Clarion.....	1,078	17	.....	.....	.....	.....	.....	.....	.....	2.57	- 3.00	1.84	0	7	22	9	0	s.	J. A. Miller.
Claysville.....	Washington.....	1,127	7	74.8	.....	102	3†	46	20†	41	1.69	.....	.36	0	10	13	16	2	w.	E. T. Buchanan.
Confluence.....	Somerset.....	1,352	27	.....	.....	.....	.....	.....	.....	.....	1.98	- 3.23	.65	0	8	9	7	15	w.	Grant Pyle.
Franklin.....	Venango.....	955	37	73.1	+ 1.7	100	5	43	27	40	1.58	- 3.17	.45	0	9	23	2	6	w.	F. E. Dixon.
Freeport.....	Armstrong.....	772	38	.....	.....	.....	.....	.....	.....	.....	1.41	- 3.10	.47	0	7	18	6	7	.....	Mrs. Anna R. Burtner.
Greensboro.....	Green.....	768	22	.....	.....	.....	.....	.....	.....	.....	1.17	- 4.01	.36	0	6	10	15	6	sw.	James Kramer.
Greenville.....	Mercer.....	950	15	70.6	+ .1	101	4	36	26	45	2.25	- 2.89	.73	0	8	24	6	1	w.	J. M. Orr.
Indiana.....	Indiana.....	1,350	14	73.6	+ 3.1	103	4	46	18	38	1.85	- 2.61	.61	0	6	19	12	0	s.	R. W. Wehrle.
Johnstown.....	Cambria.....	1,184	17	75.1	+ 1.8	101	5	47	26	37	1.43	- 3.24	.68	0	10	8	21	2	s.	E. C. Lorentz.
Lock No. 4.....	Washington.....	718	25	.....	.....	.....	.....	.....	.....	.....	2.16	- 2.50	.93	0	8	17	13	1	s.	R. T. McGowan.
Lycippus.....	Westmoreland.....	1,420	19	73.8	+ 1.1	99	4	50	26	29	3.15	- 1.99	1.20	0	7	.....	.....	.....	.....	Murray Forbes.
Pittsburgh.....	Allegheny.....	842	41	75.4	+ .8	100	4	54	25	29	2.17	- 2.25	1.12	0	7	12	16	3	nw.	U. S. Weather Bureau.
Saegerstown.....	Crawford.....	1,116	20	67.6	- 1.7	97	4	39	27	46	1.41	- 3.39	.35	0	10	11	14	6	w.	J. G. Apple.
Skidmore.....	Lawrence.....	1,000	7	72.2	.....	98	4	43	26	35	.....	.....	.65	0	2	.....	.....	.....	s.	W. H. Stoner.
Somerset.....	Somerset.....	2,250	55	71.2	+ 2.6	97	3	43	26	37	5.19	+ .28	1.33	0	7	4	25	2	nw.	W. M. Schrock.
Uniontown.....	Fayette.....	999	23	73.9	+ .8	96	4	51	26	33	2.73	- 2.94	.85	0	10	5	19	7	.....	Wm. Hunt.
Warren.....	Warren.....	1,137	22	70.0	+ .3	98	4	42	28	41	3.20	- 2.19	.80	0	11	.....	.....	.....	sw.	Anna Simpson.
<i>Maryland.</i>																				
Deer Park.....	Garrett.....	17	69.2	+ 2.4	104	6	35	1	56	2.96	- 2.04	1.76	0	6	.....	.....	.....	.....	s.	S. P. Specht.
Grantsville.....	do.....	17	68.0	- 0.3	91	4	43	26	40	2.02	- 2.89	0.90	0	7	13	16	2	.....	J. S. Miller.	
Oakland.....	do.....	11	67.8	+ 1.3	91	3†	39	23	44	2.63	- 1.94	1.14	0	9	20	10	1	w.	R. E. Weber.	
<i>West Virginia.</i>																				
Bancroft.....	Putnam.....	574	10	76.4	.....	101	3†	47	27	43	1.90	- 2.64	0.56	0	9	19	1	11	ne.	James Hill.
Beckley.....	Raleigh.....	2,440	12	69.6	- 2.0	93	1	42	26	44	1.67	- 2.23	.70	0	5	21	6	4	w.	John A. Ewart.
Bens Run.....	Pleasants.....	622	10	76.6	+ 1.5	106	4	53	27	36	3.78	- 1.62	2.09	0	7	20	11	0	.....	J. D. Riggs.
Bluefield.....	Mercer.....	2,563	17	71.0	- 0.7	92	3	45	27	33	2.97	- 1.63	0.41	0	15	12	16	3	.....	Norfolk & Western R. R.
Buckhannon.....	Upshur.....	1,472	20	72.0	- 0.5	96	4	44	27	42	1.24	- 4.19	.58	0	5	22	9	0	.....	H. A. Darnall.
Cairo.....	Ritchie.....	667	10	77.0	+ 3.1	102	3†	50	25	38	1.95	- 2.06	.70	0	5	4	20	7	s.	Van A. Zevely.
Central Station.....	Doddridge.....	900	11	72.1	- 1.0	99	4	43	27	41	3.53	- 0.10	1.58	0	8	8	23	0	se.	G. W. Sherwood.
Charleston.....	Kanawha.....	598	24	76.6	.....	100	3	53	27	31	2.55	- 1.39	0.95	0	6	24	6	1	w.	R. C. Hewes.
Creston.....	Wirt.....	612	11	74.9	+ 0.2	101	3†	49	25†	40	4.60	- 1.09	0.99	0	5	19	3	4	w.	J. M. Reed.
Cuba.....	Jackson.....	544	19	74.4	+ 1.6	100	4	46	25†	40	1.10	- 3.18	.62	0	5	8	23	0	w.	C. T. Perry.
Elkhorn.....	McDowell.....	1,933	19	70.4	- 1.8	94	3	46	27	36	3.76	- 1.61	1.30	0	8	19	12	0	sw.	J. J. Lincoln.
Elkins.....	Randolph.....	1,940	13	76.0	0	93	5	47	27	34	3.67	- 0.97	0.95	0	10	8	21	2	w.	U. S. Weather Bureau.
Fairmont.....	Marion.....	879	23	76.4	.....	105	4	48	23	34	3.50	- 1.37	1.00	0	10	.....	.....	.....	w.	H. Glenn Fleming.
Glenville.....	Gilmor.....	738	22	76.1	+ 1.8	103	4	48	27	40	2.43	- 2.77	0.65	0	7	6	13	12	sw.	John Holt.
Grafton.....	Taylor.....	985	18	74.9	+ 2.2	101	4	48	23	49	5.02	+ 0.07	1.85	0	10	20	11	0	.....	John W. Snider.
Green Sulphur Springs.....	Summers.....	1,600	16	70.4	- 1.9	93	2†	44	27	37	3.60	+ 0.01	1.45	0	12	9	22	0	w.	Arthur George.
Hinton.....	do.....	1,400	21	73.8	- 0.5	95	2†	50	26†	38	2.08	- 1.58	0.46	0	8	24	4	3	w.	J. B. Lavender, C. E.
Huntington.....	Cabell.....	510	17	76.0	- 0.6	101	3	51	27	33	2.02	- 2.51	1.68	0	6	25	1	5	w.	L. H. Hutchinson.
Lewisburg.....	Greenbrier.....	2,200	11	70.6	- 0.9	94	3†	44	27	40	2.82	- 1.09	0.79	0	9	27	4	0	sw.	Geo. T. Argabrite.
Logan.....	Logan.....	665	10	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	0	6	21	8	2	w.	H. C. Ragland.
Lost Creek.....	Harrison.....	1,033	15	72.0	- 0.6	98	4	43	27	45	1.75	- 3.29	0.65	0	6	21	8	2	w.	Allen Smith.
Madison.....	Boone.....	704	8	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	0	6	21	8	2	w.	S. E. Bradley.
Mannington.....	Marion.....	967	10	72.6	.....	99	3	40	23	40	4.60	+ 0.26	1.61	0	10	24	7	0	w.	Jas. A. Morgan.
Marlinton.....	Pocahontas.....	2,169	17	70.2	+ 0.8	94	2	40	15	45	2.07	- 3.57	0.70	0	9	14	16	0	.....	C. J. McCarty.
Morgantown.....	Monongalia.....	1,250	20	74.0	+ 0.4	98	4	45	26	33	4.23	- 0.97	1.22	0	8	17 ^b	12 ^b	1 ^b s.	Horace Atwood.	
Moundsville.....	Marshall.....	640	10	76.2	+ 2.2	103	3†	51	26†	42	1.59	- 2.88	0.71	0	7	20	4	7	sw.	M. L. Brown.
New Cumberland.....	Hancock.....	987	14	74.8	+ 1.7	103	4	46	27	34	3.20	- 1.42	1.10	0	8	13	11	7	sw.	Frank S. Evans.
Nuttallburg.....	Wetzel.....	634	18	77.2	+ 1.7	104	3	51	27	38	1.63	- 3.42	0.72	0	5	17	14	0	s.	Wm. Ankrum.
Parkersburg.....	Fayette.....	2,252	18	67.8	- 0.8	90	4†	46	27†	36	6.94	+ 2.65	1.80	0	8	17	6	2	.....	Miss Donna Tully.
Parsons.....	Wood.....	638	23	76.6	+ 0.9	102	3	54	27	31	1.63	- 3.03	0.61	0	6	14	13	4	sw.	U. S. Weather Bureau.
Philippi.....	Tucker.....	1,662	12	70.4	- 0.1	96	4	43	23†	42	1.68	- 2.81	0.90	0	4	11	20	0	.....	J. W. Swisher.
Pickens.....	Barbour.....	1,192	13	74.5	+ 2.0	101	4	44	27	42	1.70	- 3.52	0.91	0	8	19	12	0	w.	J. D. Dadisman.
Pineville.....	Randolph.....	2,785	20	67.0	- 2.3	87	4	46	25†	33	3.55	- 2.76	0.98	0	9	19	10	2	w.	Dr. J. L. Cunningham.
Point Pleasant.....</td																				

TABLE 1.—*Climatological data for July, 1911. District No. 3—Continued.*

Stations.	Counties.	Elevation, feet.	Length of record, years.	Temperature, in degrees Fahrenheit.						Precipitation, in inches.						Sky.			Observers.	
				Mean.			Departure from the normal.			Highest.			Lowest.			Greatest daily range.				
				Date.	Total.	Greatest in 24 hours.	Date.	Total.	Greatest in 24 hours.	Date.	Total.	Greatest in 24 hours.	Date.	Total.	Greatest in 24 hours.	Date.	Total.	Greatest in 24 hours.		
<i>Ohio—Continued.</i>																				
Camp Denison	Hamilton	75.4	-1.2	102	3†	48	27	40	2.79	-0.81	0.91	0	10	15	13	3	sw.	Henry F. Pinkvoss.		
Canal Dover	Tuscarawas	73.6	+0.6	101	3	46	27	39	1.75	-2.92	0.45	0	7	16	14	1	sw.	Ed. S. Slingluff.		
Canton	Stark	73.3	+1.1	99	3	46	27	34	3.48	-1.29	1.67	0	8	25	3	sw.	Carl H. Meyer.			
Cardington	Morrow	73.7	+1.7	101	3†	47	26	37	2.45	-1.79	0.62	0	6	20	3	sw.	J. W. Shaw.			
Chillicothe	Ross								0.20				2						Marion Mackey.	
Cincinnati	Hamilton	76.9	-0.8	102	4	54	26	28	4.61	+1.07	1.43	0	9	10	15	6	w.	U. S. Weather Bureau.		
Circleville	Pickaway	76.0	+0.7	103	4	50	25	35	3.12	-0.82	0.80	0	9	19	8	4	se.	Hon. S. W. Courtright.		
Clarington	Monroe	74.4	-1.0	101	4	48	25	37	1.35	-0.35	0.45	0	6	11	19	1	sw.	Col. S. Tschappat.		
Columbus	Franklin	75.7	+0.4	104	4	52	25	27	3.29	-0.36	1.46	0	11	16	11	4	n.	U. S. Weather Bureau.		
Coshocton	Coshocton								2.91				0	9					Mrs. Ada Jeffries.	
Dayton	Montgomery	76.4	+0.2	107	4	47	27	39	1.36	-1.89	0.69	0	7	22	6	3	sw.	Mrs. Edith L. Boyer.		
Delaware	Delaware	74.5	+0.4	104	3	46	27	38	2.43	-1.60	0.96	0	9	17	8	6	sw.	Prof. L. L. Hudson.		
Demos	Belmont	75.2	+2.3	100	2†	49	25	41	1.98	-2.61	0.67	0	8	19	12	0	s.	J. T. Dysart.		
Dennison	Tuscarawas	74.8	-0.5	105	4	46	27	41	1.77	-0.76	0.76	0	7	17	14	0	s.	Water Supply Co.		
Frankfort	Ross	76.6	+2.0	102	3	48	27	41	0.55	-2.67	0.45	0	2	18	11	2	sw.	O. A. Cory.		
Garretttsville	Portage	70.8	+1.2	99	4	41	27	39	2.20	-1.74	0.84	0	8	18	12	1	sw.	S. M. Luther.		
Granville	Licking	74.7	+1.4	105	3	47	26†	40	2.48	-1.37	0.90	0	8	26	1	4	sw.	Dr. L. E. Davis.		
Gratiot	do.	73.5	+0.7	100	4	48	26	32	3.31	-1.45	1.01	0	11	13	18	0	sw.	W. B. Longsteth.		
Green	Adams	73.4	-2.4	105	4	48	25†	41	2.57	-1.79	0.75	0	5	23	8	0	w.	W. F. Kenyon.		
Green Hill	Columbiana	69.8	-0.9	99	4	42	27	37	2.25	-2.17	0.71	0	7	13	0	0	sw.	Jos. E. Bentley.		
Greenville	Darke	74.4	+0.9	100	3	50	27	33	1.28	-1.46	0.51	0	7	21	5	5	s.	Geo. A. Katzenberger.		
Hillsboro	Highland	76.0	+0.5	100	3†	48	25	36	0.97	-3.17	0.43	0	4	10	19	2	sw.	Carey H. Roush.		
Ironton	Lawrence	76.1	+1.5	102	3	46	26	41	3.70	-0.51	2.40	0	9	15	16	0	sw.	James Bull.		
Jacksonburg	Butler	75.5	-0.5	101	3	48	25†	33	1.82	-1.60	1.20	0	7	12	12	7	sw.	Dr. J. B. Owsley.		
Kenton	Hardin	71.6a	-1.8	103 ^a	4	45 ^a	17†	38 ^a	2.81	-0.74	1.83	0	6	19	10	2	w.	N. S. Martin.		
Killbuck	Holmes	71.8	-1.1	102	4	45	27	37	2.83	-1.75	1.40	0	10	20	10	1	ne.	Lloyd C. Schonsauer.		
Lancaster	Fairfield	75.3	+1.3	100	3†	51	26	36	1.27	-3.31	0.60	0	9	23	2	6	sw.	R. L. Renshaw.		
McConnelsville	Morgan	74.0	+0.3	99	3	49	27	34	1.83	-2.32	0.74	0	9	8	19	4	ne.	C. H. Morris.		
Marietta	Washington	76.9	+3.0	104	3	51	25	42	0.62	-0.01	2.53	0	9	9	12	10	s.	Prof. T. D. Biscoe.		
Marion	Marion	74.6	+0.7	105	3	47	27	39	3.39	-0.99	1.05	0	8	10	16	5	sw.	Dr. E. H. Raffenberger.		
Mifordton	Knox	73.2	+0.8	103	4	47	18†	38	4.14	0.00	1.77	0	7	21	10	0	sw.	L. H. Burgess.		
Milligan	Perry	73.2	-0.6	103	4	44	27	43	2.38	-1.64	0.87	0	6	13	18	0	sw.	V. C. Eveland.		
Millport	Columbiana	71.1	-0.5	99	4	43	27	38	1.79	-2.49	0.60	0	7	7	24	0	w.	G. F. Copeland.		
Nellie	Coshocton	71.6	-1.7	101	4	43	27	47	2.60	-2.32	0.75	0	8	15	15	1	w.	Miss Ethel L. Gamertsfelder.		
New Alexandria	Jefferson	76.2	+3.0	102	3†	47	21	35	3.45	-1.33	1.70	0	6	27	2	2	w.	Mrs. Mary K. Pennell.		
New Berlin	Stark	71.7	-1.5	99	4	44	27	38	3.12	-1.15	1.05	0	8	22	9	0	sw.	Clayton Holl.		
New Waterford	Columbiana	72.3	+0.7	100	3†	46	26	37	3.18	-1.45	1.55	0	6	23	7	1	sw.	Sam. C. Scott.		
Ohio State University	Franklin	74.5	+1.0	102	4	48	27	35	1.59	-1.60	0.45	0	11	14	8	9	sw.	Prof. H. C. Lord.		
Patackala	Licking	73.8	-0.1	103	3	48	18	37	2.80	-1.32	1.10	0	12	8	23	0	sw.	J. N. Ridenour.		
Peebles	Adams	73.2	-0.1	102	3	42	27	46	0.53	-0.45	0.45	0	5	17	12	2	nw.	Ora O. Smalley.		
Philo	Muskingum	74.8	+0.2	100	3	50	25	32	2.65	-1.99	1.01	0	7	16	14	1	nw.	L. C. Burckholter.		
Piqua	Miami								1.87				0	4	16	11	4	se.	Harry L. Roberts.	
Plattsburg	Clark	73.8	-0.2	102	4	46	26	34	2.23	-1.91	1.05	0	7	12	12	7	w.	F. E. Stewart.		
Portsmouth	Scioto	74.8	-1.9	101	3	50	27	42	3.01	-1.02	0.68	0	9	9	0	22	sw.	Dr. H. A. Shirrmann.		
Prospect	Marion																		Neil J. Gast.	
Rittman	Wayne	73.2	+1.4	98	3	44	27	39	1.75	-2.72	0.45	0	7	20	9	2	w.	J. B. Gish.		
Shenandoah	Richland	72.4	+0.4	101	4	46	26†	36	2.15	-2.67	0.80	0	8	22	1	1	nw.	T. B. Arnett.		
Sidney	Shelby	75.4	+0.4	104	3†	48	27	37	3.36	-0.28	1.76	0	7	19	5	7	sw.	Hanline B. Blake.		
Somerset	Perry	76.6	+1.7	103	3	50	26	32	2.46	-1.87	0.86	0	10	22	9	0	w.	Miss M. W. C. Sheridan.		
Springfield	Clark								4.02	-0.02	2.06	0	11	19	18	4	sw.	W. A. Webster.		
Summerfield	Noble	73.6	-1.0	101	3†	48	26†	41	4.10	-1.31	0.52	0	7	12	19	0	s.	H. R. McClinton.		
Syracuse	Meigs	77.1	-0.5	105	3	50	27	40	1.86	-0.28	0.52	0	7	13	15	3	sw.	E. G. Campbell.		
Thurman	Gallia	75.9	-0.2	98	3	52	25	36	1.24	-2.44	0.62	0	4	9	15	7	sw.	D. D. Thomas.		
Urbana	Champaign	74.0	+0.5	106	3	45	21†	44	3.80	-0.61	1.30	0	14	11	17	3	sw.	Prof. J. H. Williams.		
Warren	Trumbull	73.6	+1.3	100	4	44	27	44	1.73	-2.82	0.75	0	7	21	3	7	sw.	M. D. McCorkle.		
Waverly	Pike	74.3	-1.5	99	3	47	27	40	1.42	-2.36	0.62	0	7	16	4	11	sw.	Dr. Perl Hutt.		
Waynesville	Warren	74.0	-0.6	99	4	50	25†	27 ^a	1.02	-1.47	0.55	0	4	17	13	1	sw.	Charles Michener.		
Wooster	Wayne	71.8	+0.4	101	4	43	27	37	3.36	-1.21	1.46	0	10	19	11	1	nw.	Experiment station.		
Youngstown	Mahoning								1.90	-1.71	0.65	0	7	27	1	3	w.	G. R. Patton.		
Zanesville	Muskingum								2.17	-2.18	0.55	0	8	26	2	3		S. C. Sprague.		
<i>Virginia.</i>																				
Big Stone Gap	Wise	1,540	20	71.2	-1.3	91	3	49	27	32	4.88	-0.50	1.80	0	10	14	14	3	w.	John W. Fox, sr.
Blacksburg	Montgomery	2,170	20	70.6	-0.3	94	3	43	27	37	3.70	-1.12	1.70	0	10	7	15	9	w.	Agrl. Experiment Sta.
Burkes Garden	Tazewell	3,250	16	64.4	-2.8	87	3	34	27	41	3.33	-1.28	1.35	0	9	13	15	13	w.	C. H. Grever.
Elk Knob	Lee	2,243	8	72.8	-0.8	89	3†	52	25	44	5.71	-2.37	0.58	0	14	11	13	7	sw.	Henry Nicoll.
Ivanhoe	Wythe	2,028	7	70.0	-0.5	90	3	52	27†	28	4.92	-2.37	0.58	0	14	13	17	1	w.	Miss Alice G. Jewett.
Lebanon	Russell	2,131	1	70.2	-0.8	93	3	44	27	35	6.02	-0.60	3.06	0	7	15	7	9	sw.	R. W. Swain.
Marion	Smyth	2,224	16	70.5	-1.8	95	3†	42	42	58.4	+1.35	1.46	0	15	14	13	4	se.	S. W'n State Hospital.	
Mendoza	Washington	1,350	2										0.95	0	11				Frank M. Barker.	
Radford	Montgomery	1,773																		

TABLE 1.—Climatological data for July, 1911. District No. 3—Continued.

Stations.	Counties.	Elevation, feet.	Length of record, years.	Temperature, in degrees Fahrenheit.						Precipitation, in inches.						Number of rainy days, 0.01 inch or more.	Number of clear days.	Number of partly cloudy days.	Number of cloudy days.	Prevailing wind direction.	Observers.
				Mean.	Highest.	Date.	Lovest.	Date.	Greatest daily range.	Total.	Departure from the normal:	Greatest in 24 hours.	Total snowfall, unmeted.								
<i>Georgia.</i>																					
Diamond.....	Gilmer.....	2,020	21	73.0	-1.3	98	3	48	27	36	8.88	+ 2.33	4.53	0	13	8	15	8	1	n.	R. A. Kimzey.
Mineralbluff.....	Fannin.....			72.8	95	1	46	26	33	5.02	1.41	0	15	8	22	1	J. M. Clement.
<i>Alabama.</i>																					
Bridgeport.....	Jackson.....	660	11	77.7	-2.1	99	3	56	20†	31	6.44	+ 1.21	1.96	0	10	w.	R. L. Moore.
Decatur.....	Morgan.....	573	29	77.7	-1.4	95	2†	60	25†	23	5.15	+ 0.68	1.23	0	11	12	7	12	e.	Ernest A. Carriger.	
Florence.....	Lauderdale.....	563	27	77.8	-1.4	95	2†	56	20†	35	7.33	+ 2.56	1.75	0	13	16	3	12	e.	Robt. E. Coburn.	
Guntersville.....	Marshall.....	580	1	77.4	.....	101	3	55	20†	35	8.53	.....	2.26	0	14	9	6	16	ne.	L. S. Long.
Madison.....	Madison.....	573	17	75.9	-3.3	99	2	54	20†	36	7.68	+ 3.32	1.75	0	13	10	20	1	sw.	Albert Klish.	
Riverson.....	Colbert.....	360	14	74.1	-4.7	96	1	50	26	36	5.74	+ 1.28	2.02	0	11	8	8	5	e.	Ernie J. Moore.	
Scottsboro.....	Jackson.....	652	28	75.4	-2.7	99	3	53	27†	34	6.42	+ 1.15	1.20	0	14	6	8	17	sw.	H. A. Caldwell.	
Tuscumbia.....	Colbert.....	488	29	78.1	-1.9	99	2†	57	20†	32	5.10	+ 0.54	2.10	0	11	7	5	19	se.	Samuel Moore.	
<i>Tennessee.</i>																					
Ashwood.....	Maury.....	725	32	75.2	-2.9	96	3	50	27†	36	2.56	-1.88	0.53	0	9	8	9	14	s.	Mrs. Joseph W. Fleming.	
Benton.....	Polk.....	880	26	76.0	-1.0	98	3	50	27	35	7.90	+ 3.25	2.38	0	14	5	21	5	n.	George L. Williams.	
Bird's Bridge.....	Greene.....		5	.....	.....	.....	.....	.....	.....	.....	5.68	.....	1.50	0	10	16	4	11	e.	David B. George.
Bluff City.....	Sullivan.....	1,026	14	75.2	-0.7	98	3	49	27	40	3.43	.....	1.20	0	9	10	7	14	.....	John W. Fisher.
Byrstown.....	Pickett.....	500	27	77.4	0.0	101	3	52	25†	34	2.40	-3.15	1.10	0	6	5	21	5	se.	John Lacy.	
Carthage.....	Smith.....	625	11	77.8	-1.1	102	3	52	26†	37	5.11	+ 0.72	1.80	0	10	14	5	12	ne.	Earl C. Pickering.	
Cedar Hill.....	Robertson.....	494	8	.....	.....	.....	.....	.....	.....	.....	2.96	.....	2.10	0	9	20	9	2	s.	J. Frank Ruffin.
Clima.....	Clay.....	400	14	.....	.....	.....	.....	.....	.....	.....	5.47	-1.33	1.80	0	11	17	2	12	.....	Stephen B. Anderson.
Center Point.....	Chester.....	709	14	.....	.....	.....	.....	.....	.....	.....	5.40	-1.53	1.62	0	15	7	14	10	w.	Halbert H. Bailey.
Charleston.....	Bradley.....	508	32	76.1	-1.7	96	3	56	28	29	5.40	+ 1.53	1.52	0	7	17	10	4	.....	John T. Weeks.
Chattanooga.....	Hamilton.....	500	48	77.6	-0.3	100	4	53	27	33	2.77	-1.18	1.05	0	8	21	1	9	sw.	U. S. Weather Bureau.	
Clarksville.....	Montgomery.....	800	23	.....	.....	.....	.....	.....	.....	.....	2.52	-3.21	0.68	0	8	21	1	9	.....	Prof. James A. Lyon.
Clinton.....	Jefferson.....	850	7	76.0	-1.6	97	3	51	26	34	7.24	+ 2.17	1.87	0	13	12	2	sw.	Hugh Evans.		
Dandridge.....	Meigs.....	850	15	76.0	-1.6	97	3	51	25	31	5.31	+ 1.29	1.64	0	8	16	9	6	.....	James E. Swann.
Decatur.....	Dickson.....	800	15	74.8	-2.8	97	3	51	25	31	3.86	-0.18	1.87	0	6	18	6	7	s.	J. Worth Lillard.	
Dickson.....	Dover.....	500	16	78.4	0.0	105	3	52	25†	38	3.14	-0.18	0.46	0	9	16	11	4	s.	Nathan R. Sugg.	
Dunlap.....	Squatchie.....	726	2	75.4	.....	100	2	50	27	37	5.84	.....	2.03	0	13	11	17	3	.....	Asa M. Tippit.
Elizabethton.....	Carter.....	1,575	21	70.7	-1.5	95	3	41	27	40	5.36	-0.51	1.42	0	11	14	12	5	se.	S. Bradford Boyd.	
Erasmus.....	Cumberland.....	1,850	14	70.7	-1.5	95	3	41	27	40	1.77	-2.50	0.46	0	9	16	11	4	s.	Charles Boyd.	
Florence.....	Rutherford.....	560	23	75.6	-1.9	94	3	53	25†	31	1.77	-2.50	0.46	0	10	13	8	10	.....	Mrs. Sara E. Ashley.
Franklin.....	Williamson.....	648	21	75.5	-1.8	93	3	54	28	28	4.69	+ 0.92	2.16	0	7	17	0	14	s.	Erasmus P. Bell.	
Hall's Hill.....	Rutherford.....	9	.....	.....	.....	.....	.....	.....	.....	.....	3.94	.....	0.85	0	7	17	0	14	.....	Young M. Rizer.
Harriman.....	Roane.....	841	16	.....	.....	.....	.....	52	26†	35	4.16	-1.91	1.39	0	7	10	21	0	.....	Ed F. Wright.
Hohewald.....	Lewis.....	983	25	74.6	-1.9	95	3	50	26	35	3.63	-1.12	0.55	0	12	10	19	2	s.	Robert R. Ayres.	
Iron City.....	Lawrence.....	600	14	75.2	-2.5	96	3	50	26	34	7.15	+ 3.15	2.25	0	10	4	26	1	sw.	John Lutzelman.	
Jefferson City.....	Jefferson.....	1	.....	.....	.....	.....	.....	.....	.....	.....	4.21	.....	1.87	0	10	14	12	5	.....	Calvin C. Maddox.
Johnson City.....	Washington.....	1,620	75.6	+ 1.1	100	2	49	26†	39	1.69	-4.11	0.65	0	10	14	12	5	n.	Ward Crosby.		
Johnsonville.....	Humphreys.....	364	15	77.2	-1.6	102	3	51	25†	38	4.64	+ 0.44	1.32	0	11	12	11	8	s.	Miss Sallie B. Matthews.	
Kingston.....	Roane.....	20	.....	.....	.....	.....	.....	.....	.....	.....	3.86	-1.04	1.02	0	11	19	0	12	.....	Henry Crumbliss.
Knoxville.....	Knox.....	977	40	75.8	-0.4	97	3	56	27	29	4.31	+ 0.10	1.15	0	6	7	17	7	sw.	U. S. Weather Bureau.	
Lebanon.....	Wilson.....	522	2	76.2	.....	99	3	52	27	34	5.46	.....	1.85	0	11	13	10	8	s.	H. Logan Fields.
Lewisburg.....	Marshall.....	727	16	76.3	-2.1	98	3	52	27†	33	5.85	+ 1.00	2.02	0	12	16	10	5	s.	Dr. Robert D. Crutcher.	
Livingston.....	Overton.....	1,065	16	74.6	.....	101	3	48	25	37	4.55	.....	1.05	0	8	10	19	2	ne.	L. H. Carlock.
Loudon.....	Loudon.....	816	8	.....	.....	.....	.....	50	27	37	4.37	-1.29	1.08	0	10	15	8	8	w.	Robert W. Clark.
Lynnville.....	Giles.....	770	23	75.6	-1.7	93	3	54	27†	29	5.95	+ 0.49	2.21	0	11	5	24	0	10	s.	Col. James H. Burrow.
McGhee.....	Monroe.....	7	.....	.....	.....	.....	.....	.....	.....	.....	6.31	.....	1.60	0	12	21	0	13	.....	Miss Alice L. Headrick.
McMinnville.....	Warren.....	1,011	27	74.8	-1.6	97	3	50	25†	36	3.34	-2.07	0.82	0	11	7	20	4	e.	J. Tilden Sparkman.	
Maryville.....	Blount.....	1,050	15	74.8	-2.9	94	4	53	25†	33	5.28	+ 0.28	1.30	0	9	15	9	7	e.	Mrs. Sam T. Broyles.	
Mountain City.....	Johnson.....	2,486	14	69.2	-0.9	90	2	43	20†	38	5.68	-0.40	1.47	0	15	15	14	2	.....	Edward E. Barry.
Nashville.....	Davidson.....	654	40	76.6	-2.8	97	3	57	25	27	3.34	-1.01	1.50	0	9	9	12	10	e.	U. S. Weather Bureau.	
Newport.....	Cooke.....	1,280	21	73.9	-2.6	98	3	55	26†	28	5.50	+ 0.77	1.14	0	14	15	7	9	.....	Dr. Charles T. Burnett.
New River.....	Scott.....	1,215	4	.....	.....	.....	.....	.....	.....	.....	1.70	.....	0.52	0	6	16	2	13	.....	Burl W. Buttram.
Palmetto.....	Bedford.....	770	18	75.8	-2.4	97	3	53	27†	30	4.85	-0.42	1.41	0	9	17	11	3	s.	Mrs. Ross Woods.	
Pinewood.....	Hickman.....	4	75.8	.....	98	2†	50	25†	38	4.21	.....	1.90	0	8	15	5	5	.....	Miss Carrie Cash.	
Pope.....	Perry.....	400	14	78.2	-0.7	106	4	50	25†	45	1.24	-2.51	0.36	0	6	18	10	3	s.	Miss Bessie Howard.	
Rogersville.....	Hawkins.....	1,150	26	74.5	-0.1	96	5	48	27	39	2.41	-2.49	1.00	0	11	11	13	7	e.	Fred Beal.	
Rugby.....	Hardin.....	1,410	23	73.0	-1.0	96	2†	42	27	42	2.81	-2.59	0.65	0	9	6	10	15	se.	Samuel G. Wilson.	
Savannah.....	Sevier.....	442	27	75.8	-3.1	96	3	50	26	27	7.70	+ 3.26	1.80	0	9	11	2	11	.....	William Fort Bell.
Sevierville.....	Franklin.....	5	74.4	.....	95	2	52	26†	32	3.59	.....	1.41	0	9	2	10	9	19	sw.	Herbert O. Eekel.
Springdale.....	White.....	2,000	15	74.2	-0.6	92	3†	55	27	28	7.95	+ 2.81	3.47	0	9	2	10	9	w.	Arthur H. Noll.	
Tazewell.....	White.....	920	5	75.4	.....	98	3	50	28	36	4.45	.....	1.60	0	8	10	12	9	.....	Ernest H. Hull.
Tullahoma																					

TABLE 1.—Climatological data for July, 1911. District No. 3—Continued.

Stations.	Counties.	Elevation, feet.	Length of record, years.	Temperature, in degrees Fahrenheit.						Precipitation, in inches.						Sky.	Prevailing wind direction.	Observers.			
				Mean.	Departure from the normal.	Highest.	Date.	Lowest.	Date.	Greatest daily range.	Total.	Departure from the normal.	Greatest in 24 hours.	Total snowfall, unadjusted.	Number of rainy days, 0.01 inch or more.	Number of partly cloudy days.	Number of cloudy days.				
<i>Kentucky—Continued.</i>																					
Farmers.	Rowan.	668	5	74.0	+ 1.0	99	4	42	27	46	2.30	—	1.15	0	5	15	9	7	—	Miss Gertrude Sorrell.	
Frankfort.	Franklin.	560	20	77.4	+ 1.0	97	27	50	26	30	0.91	—	3.06	0.22	0	8	28	2	1	n.	J. H. Roberts.
Franklin.	Simpson.	601	7	76.4	- 1.3	98	3	51	27	33	2.49	—	1.29	0.97	0	6	4	27	0	s.	J. E. Newman.
Greensburg.	Green.	581	19	73.8	- 2.6	97	3	46	27	40	2.58	—	2.11	1.20	0	6	18	0	13	n.	L. C. Alcorn.
High Bridge.	Jessamine.	762	8	—	—	—	—	—	—	—	—	—	1.57	—	0	6	6	2	4	—	Miss Lulu Wood.
Hopkinsville.	Christian.	524	15	78.4	- 0.1	103	37	50	25	38	2.09	—	2.22	0.80	0	7	15	1	15	s.	W. F. Randle.
Irvington.	Breckinridge.	13	76.4	- 1.1	97	3	52	26	34	1.44	—	1.99	0.78	0	4	21	4	6	sw.	W. J. Piggot.	
Leitchfield.	Grayson.	635	15	75.0	- 1.4	97	3	50	26	33	1.95	—	2.57	0.66	0	6	19	8	4	se.	John E. Stone.
Lexington.	Fayette.	989	23	75.6	- 1.0	98	3	53	26	28	0.92	—	3.52	0.60	0	9	7	11	13	s.	U. S. Weather Bureau.
Loretto.	Marion.	681	14	74.4	- 1.8	99	3	45	27	39	1.87	—	2.29	0.60	0	5	25 ^a	3*	2*	—	Loretto Academy.
Louisville.	Jefferson.	525	39	74.8	- 0.2	104	3	55	26	29	3.43	—	0.31	1.58	0	9	13	12	6	s.	U. S. Weather Bureau.
Marion.	Crittenden.	16	77.4	- 0.4	100	3	52	26	31	2.15	—	1.84	0.68	0	5	12	13	6	sw.	B. C. Paris.	
Maysville.	Mason.	524	14	76.2	- 0.8	105	37	48	25	40	3.38	—	1.13	0.89	0	7	22	6	3	se.	Mrs. Mary D. Marsh.
Middlesboro.	Bell.	1,128	16	74.2	- 0.3	97	3	50	25	35	4.20	—	1.68	1.49	0	13	15	16	0	—	B. H. Perkins.
Mount Sterling.	Montgomery.	930	21	76.0	+ 0.4	102	3	50	25	37	1.64	—	3.37	1.00	0	6	24	5	2	s.	James O'Connell.
Owensboro.	Davies.	479	15	76.6	- 1.2	99	3	51	26	35	0.91	—	3.22	0.35	0	5	18	4	9	se.	Henry S. Berry.
Paducah.	McCracken.	341	22	—	—	—	—	—	—	—	—	—	1.88	0.90	0	6	25	0	6	s.	S. A. Fowler.
Paintsville.	Johnson.	—	0	75.2	—	100	3	47	25	40	0.77	—	0.43	0	3	22 ^a	4*	0*	—	R. L. Atkinson.	
Pikeville.	Pike.	3	—	—	—	—	—	—	—	—	—	—	0.36	—	0	5	25	0	6	—	I. M. Williams.
Richmond.	Madison.	926	19	76.6	0	101	3	53	25	32	3.72	—	0.01	1.39	0	10	18	5	8	—	J. W. Crooke.
St. John.	Hardin.	777	15	74.6	- 0.7	100	3	45	26	35	0.99	—	2.64	0.60	0	4	24	1	6	—	Bethlehem Academy.
Scott.	Kenton.	13	75.6	- 1.4	103	3	49	26	35	2.24	—	1.33	0.52	0	10	14	14	3	s.	E. B. Wilson.	
Shelby City.	Boyle.	1,087	17	74.2	- 1.1	101	4	45	25	44	2.06	—	2.18	0.65	0	9	20	7	4	w.	W. E. Grubbs.
Shelbyville.	Shelby.	759	22	77.9	+ 0.8	105	3	50	27	34	1.16	—	3.04	0.76	0	4	21	8	2	w.	C. R. Burnett.
Taylorville.	Spencer.	489	9	75.4	- 0.4	100	3	46	25	41	0.96	—	3.88	0.44	0	7	11	14	6	s.	E. D. Bourne.
Williamsburg.	Whitley.	939	15	74.8	- 2.0	99	3	47	27	40	3.66	—	2.54	1.81	0	7	24	0	7	e.	Noble Sarah J. Jones.
Williamstown.	Grant.	943	9	74.6	- 0.5	98	4	49	25	28	6.55	—	2.14	2.27	0	8	27	3	1	—	Mrs. Sarah E. Carter.
<i>Indiana.</i>																					
Anderson.	Madison.	892	16	75.5	+ 1.2	105	4	48	25	37	2.19	—	1.36	1.40	0	6	19	8	4	sw.	W. H. Stanton.
Attica.	Fountain.	522	1	—	—	—	—	—	—	—	4.50	—	1.76	—	0	10	—	—	—	—	Robt. E. Ray.
Bloomington.	Monroe.	744	16	74.8	- 1.5	101	4	46	26	38	0.66	—	3.19	0.20	0	7	22	5	4	sw.	Earl E. Ramsey.
Bluffton.	Wells.	835	16	74.7	+ 0.8	104	47	47	22	40	0.65	—	2.89	0.45	0	5	8	20	3	w.	Tom R. Johnston.
Butterville.	Jennings.	767	26	76.6	+ 0.7	103	47	47	27	38	0.89	—	2.69	0.23	0	6	24	6	1	—	C. F. Hole.
Cambridge City.	Wayne.	941	20	73.6	0	102	3	44	24	43	1.28	—	2.32	0.38	0	10	26	0	5	se.	Charles Lemberger.
Columbus.	Bartholomew.	632	28	75.5	+ 0.1	104	4	45	26	43	0.68	—	2.33	0.30	0	5	24	1	6	sw.	John A. Perry.
Connersville.	Fayette.	769	29	75.6	+ 1.3	106	4	46	27	41	0.80	—	2.51	0.42	0	3	10	20	1	sw.	H. T. Swindler.
Crawfordsville.	Montgomery.	780	1	75.8	—	106	4	45	26	42	2.34	—	0.95	0	5	14	10	7	sw.	P. H. Burns.	
Delphi.	Carroll.	668	26	75.1	+ 0.8	105	4	46	26	39	3.32	—	0.47	0.86	0	11	14	9	8	—	L. A. Higginbotham.
Eminence.	Morgan.	782	5	73.7	—	99	4	45	26	39	2.06	—	1.52	0	4	19	12	0	sw.	E. E. Kelso, M. D.	
Evansville.	Vanderburg.	336	35	78.6	- 0.7	101	3	56	25	36	0.86	—	2.95	0.37	0	7	8	21	2	s.	U. S. Weather Bureau.
Farmersburg.	Sullivan.	13	75.2b	- 0.8	100	4	50 ^b	27	34 ^b	1.00	—	3.25	0.36	0	5	7	22	2	s.	Maurice Yeager.	
Farmland.	Randolph.	1,101	29	73.4	0	97	47	50	25	32	1.07	—	2.34	0.52	0	5	22	2	7	w.	W. J. Davison.
Greenfield.	Hancock.	905	8	74.8	—	100	4	48	26	35	0.61	—	0.35	—	0	3	22	6	3	sw.	Prof. W. C. Goble.
Greensburg.	Decatur.	954	15	76.6	+ 1.0	101	4	42	26	34	1.08	—	3.28	0.50	0	5	16	13	2	s.	C. C. Morrison, M. D.
Huntingburg.	Dubois.	402	3	76.9	—	101	4	49	26	35	0.48	—	0.75	—	0	6	16	10	5	sw.	H. Dufendach.
Huntington.	Huntington.	741	18	74.4	+ 0.2	98	47	48	26	37	1.51	—	2.13	0.65	0	6	16	10	5	sw.	Chas. McGrew.
Indianapolis.	Marion.	822	40	76.0	- 0.2	103	4	51	25	25	2.35	—	1.78	1.63	0	7	8	15	5	sw.	Section Leader.
Jeffersonville.	Clark.	455	29	77.3	- 0.5	106	4	52	27	34	2.01	—	1.93	1.08	0	10	15	12	4	e.	John C. Loomis.
Judyville.	Warren.	—	4	74.0 ^b	—	103	4	42	26	45	1.49	—	0.71	0.71	0	8	18	7	6	s.	Dale R. Warrick.
Kokomo.	Howard.	840	19	72.4	- 2.2	101	4	45	26	37	2.17	—	1.28	0.78	0	7	18	10	3	sw.	P. H. Robertson.
Lafayette.	Tipppecanoe.	617	32	75.5	+ 1.0	104	4	46	26	37	2.96	—	0.83	1.44	0	9	24	1	6	se.	Wm. J. Jones, Jr.
Laurel.	Franklin.	—	1	73.2	—	102	4	45	27	40	1.27	—	0.80	—	0	6	18	5	8	w.	Burch Schultz.
Logansport.	Cass.	620	31	76.0	+ 0.6	106	4	45	26	41	3.43	+	0.14	0.89	0	9	22	4	5	e.	Chas. Massena.
Madison.	Jefferson.	460	19	76.6 ^b	- 1.0	98	5	49	25	37 ^b	1.65	—	1.94	1.29	0	6	7d	19d	14	sw.	Miss F. Cooperider.
Marengo.	Crawford.	363	29	73.8	- 2.4	96	47	44	27	41	0.46	—	3.81	0.16	0	5	11	15	5	sw.	J. M. Johnson.
Marion.	Grant.	814	25	74.8	+ 0.7	102	47	46	26	37	1.07	—	1.98	0.57	0	4	24	2	5	sw.	James F. Hood.
Mauzy.	Rush.	980	31	73.3	- 0.2	99	47	45	27	39	1.72	—	1.52	0.45	0	9	9	15	7	sw.	Elwood Kirkwood.
Monticello.	White.	674	1	—	—	—	—	—	—	—	—	—	2.27	—	0	7	21	6	4	se.	J. E. Loughry.
Moores Hill.	Dearborn.	980	10	75.2	+ 0.3	100	4	49	25	37	1.71	—	1.19	0.80	0	10	21	4	6	se.	W. S. Bigney.
Mount Vernon.	Posey.	410	25	77.3	- 1.3	97	47	50	26	34	0.83	—	3.48	0.30	0	4	23	3	5	sw.	Guy B. Green.
Pao.	Orange.	611	14	75.0	- 1.7	102	4	42	25	35	0.64	—	2.77	0.32	0	5	18	10	3	s.	James A. Gillum.
Princeton.	Gibson.	481	29	75.6	+ 1.5	103	47	49	26	42	1.05	—	2.34	0.40	0	5	18	20	2	—	Albert Mills.
Richmond.	Wayne.	972	26	72.2																	

TABLE I.—*Climatological data for July, 1911. District No. 8—Continued.*

Stations.	Counties.	Elevation, feet.	Length of record, years.	Temperature, in degrees Fahrenheit.						Precipitation, in inches.						Sky.	Prevailing wind direction.	Observers.
				Mean.	Departure from the normal.	Highest.	Date.	Lowest.	Date.	Greatest daily range.	Total.	Departure from the normal.	Greatest in 24 hours.	Total snowfall, unmeasured.	Number of clear days.	Number of partly cloudy days.	Number of cloudy days.	
<i>Illinois—Continued.</i>																		
Metropolis.....	Massac.....	346																Prof. M. N. McCartney.
Montrose.....	Effingham.....	589	11	76.2	— 0.5	101	4	45	26 ^a	44	1.01	— 1.81	0.59	0	5	14	15	2 sw.
Mount Carmel.....	Wabash.....	424	10	76.2	— 0.8	100	3 [†]	50	26	34	0.88	— 2.31	0.28	0	8	23	3	Mrs. H. M. Phillips.
New Burnsides.....	Johnson.....	556	16	77.9	— 0.8	103	3 [†]	50	26	38	3.17	— 1.34	1.55	0	6	25	1	Mrs. Geo. Harris.
Olney.....	Richland.....	486	24	76.8	— 1.0	100	4	49	26	37	1.28	— 2.46	0.38	0	5	12	13	Victor E. Phillips.
Palestine.....	Crawford.....	500	29	76.2	— 0.2	101	4	49	26	34	2.26	— 1.57	1.30	0	4	10	14	Duane Shaw.
Paris.....	Edgar.....	600	18	75.8	— 0.1	103	4	48	27	39	1.79	— 1.48	1.00	0	4	19	12	H. P. Twyman.
Philo.....	Champaign.....	700	27	75.2	+ 0.6	103	4	46	26	39	2.73	— 1.12	1.36	0	6	17	13	H. A. Burr.
Rantoul.....	Champaign.....	768	20	75.8	+ 0.2	103	4	48	26	38	2.26	— 1.50	1.00	0	7	26	2	William Breiner.
Robinson.....	Crawford.....	500	11	76.2	— 0.1	100	3 [†]	50	26	34	2.13	— 2.55	1.10	0	5	18	8	A. P. Woodworth.
Sumner.....	Lawrence.....	459	5	76.3	.....	98	4	48	26	37	0.56	.....	0.25	0	3	21	1	O. A. Fyffe.
Tuscola.....	Douglas.....	644	18	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	0	6	12	19	E. W. Lester.
Urbana.....	Champaign.....	725	9	75.3	.....	102	4	47 ^b	26	36 ^b	0.62	.....	0.24	0	6	12	19	Prof. J. G. Mosier.

a, b, c, etc., indicate, respectively, 1, 2, 3, etc., days missing from the record.

** Temperature extremes are from observed readings of the dry bulb; means are computed from observed readings.

↑ Also on other dates.

† Estimated by observer.

T. Precipitation is less than 0.01 inch rain or melted snow.

TABLE 2.—*Daily precipitation for July, 1911. District No. 8, Ohio Valley.*

TABLE 2.—*Daily precipitation for July, 1911. District No. 3—Continued.*

TABLE 2.—*Daily precipitation for July, 1911. District No. 3—Continued.*

TABLE 2.—*Daily precipitation for July, 1911. District No. 3—Continued.*

* Precipitation included in that of the next measurement.
† Separate dates of falls not recorded.

Precipitation for the 24 hours ending

Precipitation for the 24 hours ending on the morning when it is measured.
Precipitation is less than 0.01 inch rain or melted snow.

... precipitation is less than 0.01 inch rain or melted snow.

TABLE 3.—*Maximum and minimum temperatures at selected stations for July, 1911. District No. 3, Ohio Valley.*

Date.	Pennsylvania.				West Virginia.										Ohio.													
	Greenville.		Pittsburgh.		Charleston.		Elkhorn.		Elkins.		Glenville.		Huntington.		Morgan-		Parkers-		Wheel-		Canton.		Cincinnati.		Columbus.		Dayton.	
	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.
1...	90	54	89	60	90	60	89	59	87	53	91	53	91	58	87	56	89	62	96	60	93	60	92	68	93	66	97	61
2...	95	62	95	70	98	67	92	62	90	60	99	65	97	64	94	65	97	69	103	62	98	68	97	73	98	73	100	67
3...	98	72	97	73	100	71	94	61	92	62	102	66	101	70	94	67	102	71	103	67	99	71	100	74	101	75	102	68
4...	101	65	100	73	97	72	93	62	92	65	103	66	100	73	98	67	100	72	105	68	95	70	102	76	104	79	107	71
5...	95	66	96	75	96	68	88	60	93	62	100	65	97	68	94	68	95	70	99	69	96	68	96	73	97	75	100	72
6...	97	68	95	78	95	70	88	59	92	60	99	65	92	71	94	67	97	73	100	71	97	74	92	69	95	77	100	72
7...	91	69	86	73	95	72	87	61	88	64	95	68	93	70	92	67	94	72	94	70	91	71	91	68	89	72	96	70
8...	94	66	89	71	84	73	83	59	85	66	90	67	87	71	90	67	90	71	95	64	94	64	92	70	96	68	96	70
9...	94	68	92	74	90	69	85	61	88	64	94	67	92	69	91	71	93	70	96	69	94	69	91	70	96	70	96	70
10...	89	68	90	68	92	63	89	62	88	66	95	68	94	70	89	70	92	72	96	68	90	71	90	74	91	72	96	73
11...	93	66	89	71	92	72	83	64	80	65	90	68	90	73	87	69	92	70	93	68	90	67	87	69	86	65	92	72
12...	87	62	88	68	90	69	86	64	84	65	91	67	89	66	86	66	90	69	93	66	86	63	91	69	88	67	94	65
13...	82	52	83	64	90	70	87	60	85	62	92	67	86	68	81	63	84	67	89	60	82	55	84	66	82	61	88	57
14...	84	54	83	63	89	63	83	58	83	55	89	59	86	63	84	60	86	62	89	59	83	54	89	64	86	62	93	57
15...	85	53	85	65	88	60	85	50	85	47	91	57	88	59	86	59	90	63	94	59	86	57	90	69	89	65	92	58
16...	87	58	89	65	88	62	83	55	88	52	93	55	86	62	80	66	89	65	93	59	88	56	81	69	84	61	85	63
17...	76	54	75	62	87	55	77	53	83	55	83	64	81	65	78	62	78	64	85	59	74	61	79	62	74	59	83	56
18...	81	43	77	55	81	57	76	50	75	50	85	53	81	58	79	56	80	59	83	53	80	49	81	63	79	57	87	51
19...	83	45	83	59	86	57	83	53	84	50	90	50	85	56	84	54	87	57	83	54	85	64	85	62	87	63	83	63
20...	86	60	84	65	88	65	82	56	88	59	93	63	87	64	86	64	91	68	89	57	85	64	90	71	87	67	93	64
21...	87	52	86	63	88	55	81	55	84	63	91	66	87	70	89	66	90	65	86	58	89	70	89	65	94	64	84	64
22...	80	40	76	60	87	64	82	51	79	55	88	62	85	65	81	61	80	61	86	60	79	54	84	63	81	56	88	49
23...	85	40	84	60	89	58	86	50	83	47	89	50	88	55	87	54	86	57	89	52	84	52	88	62	81	60	86	55
24...	81	41	78	61	87	70	82	55	75	63	84	68	83	65	80	67	78	64	83	57	74	62	78	60	74	55	77	62
25...	70	40	71	54	83	55	78	49	70	49	82	51	79	55	71	53	74	56	77	53	73	49	74	56	72	52	78	51
26...	75	36	74	56	76	55	73	48	73	49	79	57	76	55	75	51	75	57	83	51	74	48	75	54	75	52	82	50
27...	80	43	79	56	83	53	75	46	78	47	85	48	83	51	79	52	83	54	85	51	80	46	81	57	81	55	83	47
28...	85	40	84	62	87	57	84	50	84	51	90	51	87	55	85	53	87	57	93	53	86	58	86	61	90	50	91	51
29...	85	42	85	65	86	61	85	53	84	52	90	65	83	62	86	60	87	63	90	54	87	57	81	66	81	66	82	62
30...	86	56	84	65	87	65	86	60	79	60	88	63	87	67	81	60	86	67	85	57	85	56	84	64	89	62	90	62
31...	90	54	90	65	89	66	87	61	88	56	94	61	89	65	88	64	91	66	97	61	93	59	89	66	91	67	94	61
Mns..	86.8	54.5	85.7	65.1	89.0	64.3	84.3	56.4	84.1	57.2	91.1	61.1	88.1	64.0	85.9	62.0	88.2	64.9	91.4	60.6	86.6	60.0	87.3	66.5	86.7	64.7	91.2	61.7
Date.	Ohio.				Virginia.				Asheville, N. C.				Decatur, Ala. §§				Tennessee.								Beatty- ville, Ky. §§			
	Marion.	Waverly.	Big Stone Gap.	Wytheville					Chattanooga.	Johnson City. §§	Knoxville.	Nashville.	Palmetto.	Sparta.	Waynes- boro.													
	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.
1...	96	59	90	58	87	57	87	54	83	63	91	66	93	68	96	61	92	67	91	68	90	68	92	60	90	61	92	55
2...	102	65	95	65	90	61	89	57	89	64	96	65	94	72	100	66	95	70	93	70	95	64	95	60	98	59	99	65
3...	105	67	99	65	91	67	93	62	89	63	99	72	96	71	95	70	97	71	97	75	97	71	98	68	90	68	99	65
4...	100	70	98	68	90	67	89	63	86	63	96	77	93	71	96	66	99	73	94	73	95	69	96	70	97	66	96	
5...	102	72	94	68	88	63	85	60	83	65	92	68	88	68	96	62	89	68	90	67	95	66	88	68	97	62	97	
6...	98	73	94	68	83	66	86	59	86	61	90	68	90	69	98	64	90	70	90	72	99	68	92	66	98	65	95	
7...	95	67	91	68	87	65	90	62	84	62	90	69	90	70	93	67	91	70	90	69	92	68	87	66	98	65	95	
8...	96	66	90	69	81	68	85	65	83	66	91	69	84	70	94	67	84	70	90	74	89	68	85	69	96	65	95	
9...	92	68	88	68	83	65	84	64	82	66	88	69	87	67	95	66	88	69	87	71	87	66	89	66	95	65	95	
10...	94	71	90	70	83	66	83	64	86	67	90	70	87	70	88	65	86	71	87	70	87	66	86	68	97	64	94	
11...	95	66	86	69	83	68	85	66	83	66	91	70	88	69	91	67	86	71	89	73	91	69	85	67	89	66	92	
12...	89	62	91	66	83	65	84	67	85	65	91	70	86	68	93	67	87	72	90	71	90	70	95	66	96	65	96	
13...	88	55	84	61	85	64																						

TABLE 3.—Maximum and minimum temperature at selected stations for July, 1911. District No. 3, Ohio Valley—Continued.

Date.	Kentucky.														Indiana.														Philo, Ill.
	Bowling Green §§		Earling-ton. §§		Greensburg. §§		Lexington.		Louisville.		Mays-ville. §§		Williams-burg. §§		Butlerville.		Evansville.		Indianap-olis.		Kokomo.		Rockville.		Worthing-ton.				
	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.			
1....	95	61	100	62	89	58	88	67	93	68	95	58	92	58	94	60	92	72	94	71	95	63	93	68	91	65	97	65	
2....	101	65	103	65	92	60	95	71	99	73	101	61	97	67	96	74	97	76	100	69	95	70	94	70	98	67	98	67	
3....	101	70	105	70	97	65	98	75	104	76	105	68	99	67	103	70	101	76	100	77	100	69	97	73	97	72	101	69	
4....	99	70	103	75	93	66	98	70	102	76	105	68	98	67	103	72	99	80	103	78	101	69	99	72	98	72	103	71	
5....	98	68	101	72	92	65	92	68	97	72	100	65	93	67	97	73	95	75	96	74	98	73	96	76	94	75	101	72	
6....	96	69	100	72	94	67	90	71	95	77	98	69	94	68	97	74	94	75	94	74	91	74	95	73	94	73	95	71	
7....	100	68	100	68	95	66	89	72	95	74	96	68	94	67	93	68	95	77	89	72	92	70	96	69	95	70	99	67	
8....	102	68	99	67	94	67	90	70	96	73	93	68	94	67	94	73	90	76	92	70	94	66	96	70	93	71	95	68	
9....	90	69	69	73	85	64	88	68	93	72	93	66	93	64	93	70	93	76	91	73	93	71	98	72	93	72	96	70	
10....	96	67	99	72	91	65	90	69	92	73	95	68	92	64	93	70	90	75	90	70	88	70	95	73	90	73	92	73	
11....	92	67	94	70	87	65	84	69	95	72	89	68	94	69	92	74	91	71	92	69	97	70	91	71	99	66	99	66	
12....	97	68	99	71	91	67	91	69	93	72	94	65	95	68	94	67	93	72	86	67	86	67	91	68	94	66	94	66	
13....	90	66	83	69	86	65	84	67	86	68	88	65	93	58	90	59	86	70	85	61	82	52	87	60	87	58	84	57	
14....	93	63	96	60	90	58	86	66	90	68	91	57	88	66	92	57	89	68	87	65	82	57	91	59	88	60	89	57	
15....	96	61	100	59	93	58	91	65	93	68	95	60	91	58	94	56	92	69	90	53	97	57	92	60	94	55	94	55	
16....	80	62	80	68	90	58	82	64	80	67	90	62	87	65	87	64	78	67	79	62	82	63	86	67	80	66	82	65	
17....	84	62	84	56	80	56	79	62	80	64	84	63	82	58	88	60	79	59	78	58	76	51	79	55	77	56	80	53	
18....	90	60	90	58	84	53	82	61	86	64	90	55	84	54	86	54	87	62	82	60	82	53	86	56	83	55	85	50	
19....	90	60	96	65	88	54	85	62	88	65	90	54	81	54	85	64	85	70	77	66	74	61	80	68	81	61	77	67	
20....	86	62	88	70	83	58	80	69	85	71	94	58	81	64	93	63	84	72	87	67	84	60	91	65	87	63	88	60	
21....	87	67	91	71	89	64	86	68	88	72	92	65	90	66	92	64	89	71	88	65	87	62	93	65	87	68	89	61	
22....	87	68	94	68	84	63	83	64	84	67	90	66	91	64	88	50	86	68	83	60	69	48	89	55	84	56	86	50	
23....	86	57	84	60	90	52	85	62	86	60	93	53	89	58	87	57	82	68	82	63	76	56	79	61	81	58	79	59	
24....	82	60	81	64	88	56	78	61	78	63	81	65	81	55	78	63	78	63	74	57	74	53	76	59	78	60	73	55	
25....	82	51	82	49	77	45	75	53	77	55	79	48	80	50	78	49	79	59	71	51	70	46	74	50	76	50	75	48	
26....	80	52	84	48	79	49	75	53	77	57	80	49	87	50	78	48	78	56	75	51	74	45	75	48	77	48	78	46	
27....	87	52	93	49	83	46	82	57	84	58	87	50	89	47	84	47	88	58	80	57	66	48	80	53	84	50	86	49	
28....	88	54	93	55	88	48	85	63	89	60	93	50	89	50	88	59	86	63	84	61	84	50	84	58	88	54	87	58	
29....	90	58	75	67	78	52	78	65	74	69	85	52	89	57	83	66	75	67	73	66	77	62	73	65	79	67	85	67	
30....	89	60	88	64	90	63	86	66	85	68	92	63	86	61	84	66	84	68	84	66	83	61	78	67	82	68	84	67	
31....	84	65	89	68	87	64	84	68	89	68	92	62	85	60	92	64	87	70	86	67	86	62	84	65	79	64	88	64	
Mns.	90.9	65.6	93.0	64.7	88.0	59.5	85.7	65.6	88.8	68.0	91.9	60.6	89.4	60.1	90.4	62.7	87.7	69.4	86.1	65.8	84.6	60.3	87.9	64.1	86.8	63.7	88.8	61.7	

*, b, c, etc., indicate, respectively, 1, 2, 3, etc., days missing from the record.

§ Data are from standard instruments not supplied by the U. S. Weather Bureau.

§§ Instruments are ready in the morning; the maximum temperature then read is charged to the preceding day, on which it almost always occurs.